Claims

1. A method for detecting an analyte A in a sample, comprising:

incubating an incubation mixture comprising a sample with an analyte A-specific binding partner R1, which is associated with a solid phase, an analyte A-specific binding partner R2, which is associated with a label L1, and an analyte A-specific binding partner R3, which is associated with a label L2, wherein saturation of analyte A-binding sites of the binding partner R2 takes place at a higher analyte A concentration, at a later time in the incubation, or at a higher analyte A concentration and at a later time in the incubation, than does saturation of analyte A-binding sites of the binding partner R3; and

determining an L1-dependent measurement signal at a different time from an L2-dependent measurement signal or an L1 plus L2-dependent measurement signal, or determining the L1-dependent measurement signal using a different measurement method than used to determine the L2-dependent measurement signal or the L1 plus L2-dependent measurement signal.

2. The method of claim 1, wherein the method comprises a quantitative measurement.

3. The method of claim 1, wherein the method comprises a qualitative measurement.

4. The method of claim 1, wherein the method comprises at least one of detecting, avoiding, and decreasing a hook effect.

5. The method of claim 1, wherein:

(i) the sample is incubated with the analyte A-specific binding partner R1, which is associated with the solid phase, the analyte A-specific binding partner R2, which is

associated with the label L1, and the analyte A-specific binding partner R3, which is associated with a member X of a specific binding pair;

(ii) at a later time, label L2, which is associated with a binding pair member Y, corresponding to X, of the specific binding pair, is added to the incubation mixture; and

(iii) the L1-dependent measurement signal is determined at time Tl, the L2-dependent measurement signal or the L1 plus L2-dependent measurement signal is determined at time T2, with Tl being earlier than T2 and being at the latest shortly after adding label L2, which is associated with binding pair member Y, and T2 being after adding label L2, which is associated with binding pair member Y.

6. The method of claim 1, wherein:

(i) the sample is incubated with the analyte A-specific binding partner R1, which is associated with the solid phase, the analyte A-specific binding partner R2, which is associated with the label L1, and the analyte A-specific binding partner R3, which is associated with a member X of a specific binding pair;

(ii) at a later time, label L2, which is associated with a binding pair member Y, corresponding to X, of the specific binding pair, is added to the incubation mixture; and

(iii) the L1-dependent measurement signal and the L2-dependent measurement signal are determined using different measurement methods.

7. The method of claim 1, wherein the method is a heterogeneous or a homogeneous sandwich test.

8. The method of claim 1, wherein R1 and R2; R1 and R3; R1, R2, and R3; or R2 and R3; are the same binding partner.

9. The method of claim 1, wherein L1 and L2 are the same label.

10. The method of claim 1, wherein the solid phase is a suspendable solid phase.

11. The method of claim 10, wherein the suspendable solid phase comprises microparticles.

12. The method of claim 11, wherein the microparticles function as a label.

13. The method of claim 1, wherein the binding partner R2 is associated with a suspendable solid phase.

14. The method of claim 13, wherein the suspendable solid phase comprises microparticles.

15. The method of claim 14, wherein the microparticles constitute the label L1.

16. The method of claim 1, wherein, as a consequence of formation of a sandwich, components of a signal-forming system, which include at least one of L1 and L2, are brought to a distance from each other which permits an interaction between these components, and the extent of the interaction is measured.

17. The method of claim 1, wherein the interaction comprises an energy transfer.

18. The method of claim 16, wherein the signal-forming system comprises photosensitizers which are associated with microparticles and chemiluminescent substances which are associated with microparticles.

19. A method for detecting an analyte A in a sample, comprising:

incubating an incubation mixture comprising a sample with an analyte A-specific binding partner R1, which is associated with a solid phase, an analyte A-specific binding partner R2, which is associated with a label L1, and an analyte A-specific binding partner R3, which is associated with a member X of a specific binding pair, and a label L2, which is associated with a binding pair member Y, corresponding to X, of the specific binding pair, wherein saturation of analyte A-binding sites of the binding partner R2 takes place at a higher analyte A concentration, at a later time in the incubation, or at a higher analyte A concentration and at a later time in the incubation, than does saturation of analyte A-binding sites of the binding partner R3; and

determining an L1-dependent measurement signal at a different time from an L2-dependent measurement signal or an L1 plus L2-dependent measurement signal, or determining the L1-dependent measurement signal using a different measurement method than used to determine the L2-dependent measurement signal or the L1 plus L2-dependent measurement signal.

20. The method of claim 19, wherein the method comprises at least one of detecting, avoiding, and decreasing a hook effect.

21. The method of claim 19, wherein the method comprises a homogeneous sandwich test.

22. The method of claim 19, wherein the method comprises quantitatively or qualitatively detecting the analyte A in the sample.

23. A test kit for detecting an analyte A in a sample, comprising:

an analyte A-specific binding partner R1, which is associated with a solid phase;

an analyte A-specific binding partner R2, which is associated with a label L1; and

an analyte A-specific binding partner R3, which is associated with a label L2;

wherein saturation, in an incubation mixture of a sandwich test, of analyte A-binding sites of the binding partner R2 takes place at a higher analyte A concentration, at a later time in the incubation, or at a higher analyte A concentration and at a later time in the incubation, than does saturation of analyte A-binding sites of the binding partner R3.

24. The test kit of claim 23, wherein the test kit comprises a heterogeneous sandwich test kit or a homogeneous sandwich test kit.

25. The test kit of claim 23, wherein the test kit comprises a quantitative measurement test kit or a qualitative measurement test kit.

26. The test kit of claim 23, wherein the analyte A-specific binding partners R1, R2, and R3 are in separate receptacles.

27. A test kit for detecting an analyte A in a sample, comprising:

an analyte A-specific binding partner R1, which is associated with a solid phase;

an analyte A-specific binding partner R2, which is associated with a label L1;

an analyte A-specific binding partner R3, which is associated with a member X of a specific binding pair; and

a label L2, which is associated with the binding pair member Y, corresponding to X, of the specific binding pair;

wherein saturation, in an incubation mixture of a sandwich test, of analyte A-binding sites of the binding partner R2 takes place at a higher analyte A concentration, at a later time

in the incubation, or at a higher analyte A concentration and at a later time in the incubation, than does saturation of analyte A-binding sites of the binding partner R3.

28. The test kit of claim 27, wherein the test kit comprises a heterogeneous sandwich test kit or a homogeneous sandwich test kit.

29. The test kit of claim 27, wherein the test kit comprises a quantitative measurement test kit or a qualitative measurement test kit.

30. The test kit of claim 27, wherein the analyte A-specific binding partners R1, R2, and R3 are in separate receptacles.

31. The test kit of claim 27, wherein the analyte A-specific binding partner R2, which is associated with the label L1, and the analyte A-specific binding partner R3, which is associated with the member X of the specific binding pair, are present together in one receptacle.